



WORK STUDY
ON
REVIEW OF STRENGTH OF STAFF
UNDER SSE/W/FKG IN TINSUKIA DIVISION
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STUDY NO. WSNF/17/2019- 20.

CASE NO. Z/375/10/17/2019- 20.

CENTRAL PLANNING ORGANISATION
N. F. RAILWAY/MALIGAON
GUWAHATI - 781011.

EXECUTIVE SUMMARY

SUBJECT: Work study on “Review of strength of staff under SSE/W/FKG in Tinsukia Division.”

STUDY NO	:	WSNF/17/2019- 20
CASE NO	:	Z/375/10/17/2019- 20
AUTHORITY	:	SDGM/N.F.R.
CONCERN DIV.	:	TINSUKIA
DEPARTMENT	:	ENGINEERING
DATE OF COMMENCEMENT	:	01.04.2019
DATE OF COMPLETION	:	24.04.2019
DATE OF SUBMISSION	:	24.04.2019

TERMS OF REFERENCE:

Approved annual Programme of Work Study.

NOS. OF RECOMMENDATION: 1(One)

The study team has identified 17nos of vacant posts of different categories (Sr Tech Carpenter = 2, Tech Carpenter Gr I = 1, Tech Carpenter Gr III = 1, Tech Painter Gr-I - 2, Tech Mason Gr-I – 2, Sr Tech Fitter -1, Tech/Fitter Gr-I – 1, Sr.TechFPO -1, TechTWM Gr-I -1 &Khalasi Helper -5) as surplus and proposed for surrender, which may be deleted from the working BOS.

PROJECTED MAN POWER: 17 Posts.

PROJECTED FINANCIAL SAVING: Rs112.84 Lakhs per annum.

MONTH AND YEAR OF CIRCULATION: April/2019

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CHAPTER – I

1.0. INTRODUCTION:

The Railway administration has to make the best use of its resources including manpower keeping them at the optimum level to attain the financial viability, taking into consideration to this objectives, The Railway Board has emphasized to take up review of staff strength of various departments in the Railway. In pursuance of this policy of Railway Board, the central planning Organisation of N.F.Railway/ Maligaonhas conducted this work study on “Review of staff strength in the unit of SSE/W/FKG under Sr.DEN/C /TSK in Tinsukia Division.”

2.0. ACKNOWLEDEMENT :

Work study team is grateful to Shri P. Kumar, Sr.DEN/C/TSK for his kind guidance and co-operation for conducting this study. The work study team is also thankful to Shri A. Hazarika, ADEN/G/TSK and Shri A. Chakraborty, Ch.OS/Sr.DEN Office/TSK for his assistance rendered to the Work Study team for conducting the work study.

3.0. RATIONALE FOR CONDUCTING THIS STUDY

- Man power is the most costly and precious resource over Indian Railway and Right sizing is the need of the hour.
- Focusing attention on core activities by reducing / elimination of non-core activities.
- Improving the efficiency (out put / input) either by improving the output (numerator) or by decreasing the input (denominator).
- Up-gradation / introduction of automation / Innovations.
- Outsourcing of non core activity.
- Availability of better process/ technology.
- Reducing/ removing redundancy in work.

4.0. TERMS OF REFERENCE :

Approved annual work study programme.

5.0.METHODOLOGY:

a)Discussion with Sr.DEN/C/TSK & the nominated Sr.Subordinate

During field work, discussion was done with regarding the work study and ShriP.Kumar, Sr.DEN/TSK had nominated ShriA.Hazarika, ADEN/G/TSK and Shri A. Chakraborty, Ch.OS/TSK for the study team, which is placed as Annex-I .

b) Collection of data relating to workload

The required data is collected from Sr.DPO/TSK at DBRT Office, Sr.DEN/TSK Office to conduct the study.

CHAPTER-II

Activities of staff

- **Work load of Tech.Carpenter:**

This category is engaged for Carpentry work as well as repairing of doors, windows and other wooden structures of buildings of Railway and Railway colonies. Presently these works are accomplished by engaging the contractor/agency.

- **Work load of Black Smith:**

This category is employed to repair, fittings of Iron door, windows, grills other metal related work in railway premises. They also entrusted to fix the rolling sheet, cutting metal pipes and ancillary works in Enggdeptt.

- **Work load of Mason:**

This category is engaged for masonry work of Drains, Boundary walls & all sorts of plastering/repairing works of Railway buildings and premises. Mostly these works are accomplished by the contractor/agency engaged.

- **Work load of S/Mason:**

This category is engaged for masonry work of safety tanks, repairing the safety tanks, sewage lines of Railway buildings and premises. Presently these works are accomplished by the contractor/agency engaged.

- **Work load of FPO:**

This category Known as Filter Plant Operator are employed for operating Filter Plants of Pump House for each station building for water supply which are presently accomplished by engaging the contractor/agency. Only a skeleton staff of FPO are required to look after the contractors work and physical attendance/ work required in case of emergency.

- **Work load of Fitter :**

This category is employed to look after the plumbing , water pipeline repairing jointing work etc. of Railway premises and colonies and maintain the water line network trouble free in day to day working. Presently these works are accomplished by engaging the contractor/agency and these fitter categories are employed to keep vigil and monitor the same as and when it is required.

- **Work load of Sr. Watchman:**

Work load of watchman is to keep the assets in safe custody. Regular checking of physical condition of go-downs and sealing properly. If noticed any damage or suspicious intruders in the campus , should report to the unit in-charge immediately.

- **Work load of TWM:**

TWM is entrusted with fitting and repairing of Tube Well in the jurisdiction of SSE(Works).

- **Work load of FPO/Helper:**

This category is employed to assist the FPO in filter plant of pump house for replacing charcoal, sand etc. used in Filter plant and maintaining the plant.

WORK LOAD OF THE UNIT OF SSE/W/FGK

RESIDENTIAL QUARTER

TYPES OF QUARTER	TOTAL NO OF QUARTER
Type -I	299
Type -I (Spl)	143
Type - II	471
Type -III	35
Type -IV	11
Type -V	0
Total	959

Residential Quarter = 486 units.

Total Plinth area of residential building/Qtrs = 21600 Sqmt.

Total plinth Area of Service Building/ Office Building = 12870Sqmt

OTHER WORKS LOAD.

- 1) Road = 9840 Rm. X 2.5 mt = 24600 sqmt
- 2) Drains Major = 8080 Rm and Minor = 2200 Rm.= 10280Rm(Total) x0.3mt=3084sqmt (Average)
- 3) Bridge Major = 456.66Rm and Minor = 1369.56Rm . = 1826.22Rm(Total) x 2.5 mt = 4565.55sqmt
- 4) Level Crossing = Manned =73Nos Unmanned = Nil
- 5) Pipeline = 8810Rm

FILTER PLANT

STATION	NUMBER	TYPE OF FILTER	CAPACITY
FKG	1	IRP	1,40,000 gallon.
GLGT	1	Mini water filter unit having Aeration ,sedimentation, Coagulation & underground fresh water reservoir	40,000 gallon
BBGN	1	Do	40,000 gallon
JTTN	1	IRP	43,200 gallon
KXL	1	Mini water filter unit having Aeration ,sedimentation, Coagulation & underground fresh water reservoir	40,000 gallon

DETAILS OF WORK LOAD FOR THE PERIOD FROM APRIL'18 TO MARCH'19.

Nature of Works	Number of Compliant	
	Received	Complied
Leak proof	37	30
Door changed	40	35
Masonry	138	120
Carpentry	98	80

Water Supply

Station	Tap Water	Raw Water	No of Tube well	No of Deep Tube well
FKG	0	0	0	
GLGT	0	0	0	
NMGY	2	0	0	
KLTI	5	0	0	
BLPR	0	0	0	
RNGG	0	0	0	
BBGN	0	0	0	
MOBO	0	0	0	
BLMR	0	0	0	
RWH	1	0	0	
JTTN	0	0	0	
TTB	1	0	0	
CFG	0	0	0	
KXL	0	0	0	

No of Trolley = Nil

No of Rest House = 2 nos.

RUB = Nil.

FOB = 2 Nos.

Retiring Room + 2 Nos.

No of Godown = 20 Nos.

2.3. STAFF POSITION OF SSE/W/FKG OF TINSUKIA DIVISION

SN	CATEGORY	SCALE	G/PAY	BOS	ON ROLL	VACANCY
1	Sr Tech Carpenter (MCM)	9300-34800	4200	02	00	02
2	Tech Carpenter Gr-I	5200-20200	2800	03	02	01
3	Tech Carpenter Gr-II	5200-20200	2400	00	00	00
4	Tech Carpenter Gr-III	5200-20200	1900	01	00	01
5	Sr Tech Painter	9300-34800	4200	01	01	00
6	Tech PainterGr- I	5200-20200	2800	03	01	02
7	Tech Painter Gr-II	5200-20200	2400	00	01	-01(Excess)
8	Tech Painter Gr-III	5200-20200	1900	00	00	00
	Sr Tech Black Smith	9300-34800	4200	00	01	-01(Excess)
9	Tech Black Smith Gr-I	5200-20200	2800	00	00	00
10	Tech Black Smith Gr-II	5200-20200	2400	00	00	00
11	Tech Black Smith Gr-III	5200-20200	1900	00	00	00
12	Sr Tech Mason (MCM)	9300-34800	4200	01	01	00
13	Tech Mason Gr-I	5200-20200	2800	02	00	02
14	Tech Mason Gr-II	5200-20200	2400	00	00	00
15	Tech Mason Gr-III	5200-20200	1900	00	01	-01(Excess)
	Sr Tech S/Mason	9300-34800	4200	01	01	00
16	Tech S/Mason Gr-I	5200-20200	2800	01	02	-01(Excess)
17	Tech S/Mason Gr-II	5200-20200	2400	00	00	00
18	Sr Tech/Fitter	9300-34800	4200	01	00	01
19	Tech/Fitter Gr-I	5200-20200	2800	01	00	01
20	Tech/Fitter Gr-II	5200-20200	2400	00	01	-01(Excess)
21	Tech/Fitter Gr-III	5200-20200	1900	00	00	00
22	SrTechFPO	9300-34800	4200	01	00	01
23	TechFPO Gr-I	5200-20200	2800	01	01	00
24	TechFPO Gr-II	5200-20200	2400	01	01	00
25	TechTWM Gr-I	5200-20200	2800	01	00	01
26	Khalashi,Khalasi Helper, V/M,F/M	5200-20200	1800	05	00	05
27	SWM	5200-20200	1800	02	03	-01(Excess)
		TOTAL-		28	17	17-6(Excess) =11

CHAPTER-III

3.0 . CRITICAL ANALYSIS OF EXISTING WORKLOAD AND STAFF REQUIREMENTS:

3.1. The activities and work load of Staff under SSE/W/FKG have already discussed in Chapter-II.

The Work Study Team critically examined the various activities & work load of SSE/Works/FKG according to the activity-wise observation it is seen that work load is in decreasing trend. The reason is that numbers of activities are either off loaded or some activities are becoming obsolete. More over now-a-days maximum works are done by the Railway through contractual basis where mere supervision lies on the part of SSE/Works.

3.2. EQUATED WORKLOAD OF SSE/WORKS/FKG.

The Equated Plinth areas under SSE/WORKS/FKG are:

- i) Equated Plinth area of Residential Quarters = $21600 \times 0.7 = 15,120 \text{ Sq.m}$
- ii) Equated Plinth area of Service/Office Building = $12870 \times 1 = 12,870 \text{ Sq.m}$
- iii) Equated Plinth area of Road = $24600 \times 1 = 24,600 \text{ Sq.m}$
- iv) Equated Plinth area of Drains = $3084 \times 1 = 3,084 \text{ Sq.m}$
- v) Equated Plinth area of Bridge = $4565.55 \times 1.6 = 4,565.55 \text{ Sq.m}$

Total = 60239.55 Sq.m

3.3. Work load of Carpenter:

The doors of all the Quarters are altering either by PVC or Iron, therefore the workload of Carpenters are reducing drastically.

3.4. Work load of Painter:

The activities of **Painter** are not a routine work & reduced immensely for off loading of some activities. Mostly the work of painter is accomplished by contractually.

This category is engaged for painting work of doors, windows of Railway buildings and premises, offices, station buildings etc. Presently these works are accomplished by the contractor/agency engaged.

3.5. Work load of FPO:

This category Known as Filter Plant Operator and employed for operating Filter Plants of Pump , but under SSE/W/TSK the water supply is done through deep tube well. Only at certain stations as mentioned below , the Filter Plants are operated at TSK

3.6. Work load of Helper:

This category is employed to assist the fitter in all categories like carpenter, mason, plumber, black smith etc to carry out maintenance work in Railway premises, rest houses,

As multiskilling concept is introduced in Railways working hence all artisan categories may be utilized as and when required. Therefore, for any specific work the necessity of Helper category is abolished.

3.7. SUMMARY OF PROPOSED SURPLUS STAFF UNDER SSE/W/FKG.

SN	CATEGORY	SCALE	G/PAY	BOS	ON ROLL	VACANCY	SURPLUS
1	Sr Tech Carpenter (MCM)	9300-34800	4200	02	00	02	02
2	Tech Carpenter Gr-I	5200-20200	2800	03	02	01	01
3	Tech Carpenter Gr-II	5200-20200	2400	00	00	00	
4	Tech Carpenter Gr-III	5200-20200	1900	01	00	01	01
5	Sr Tech Painter	9300-34800	4200	01	01	00	
6	Tech Painter Gr- I	5200-20200	2800	03	01	02	02
7	Tech Painter Gr-II	5200-20200	2400	00	01	-01(Excess)	(Excess)
8	Tech Painter Gr-III	5200-20200	1900	00	00	00	
	Sr Tech Black Smith	9300-34800	4200	00	01	-01(Excess)	(Excess)
9	Tech Black Smith Gr-I	5200-20200	2800	00	00	00	
10	Tech Black Smith Gr-II	5200-20200	2400	00	00	00	
11	Tech Black Smith Gr-III	5200-20200	1900	00	00	00	
12	Sr Tech Mason (MCM)	9300-34800	4200	01	01	00	
13	Tech Mason Gr-I	5200-20200	2800	02	00	02	02
14	Tech Mason Gr-II	5200-20200	2400	00	00	00	
15	Tech Mason Gr-III	5200-20200	1900	00	01	-01(Excess)	(Excess)
	Sr Tech S/Mason	9300-34800	4200	01	01	00	
16	Tech S/Mason Gr-I	5200-20200	2800	01	02	-01(Excess)	(Excess)
17	Tech S/Mason Gr-II	5200-20200	2400	00	00	00	
18	Sr Tech/Fitter	9300-34800	4200	01	00	01	01
19	Tech/Fitter Gr-I	5200-20200	2800	01	00	01	01
20	Tech/Fitter Gr-II	5200-20200	2400	00	01	-01(Excess)	(Excess)
21	Tech/Fitter Gr-III	5200-20200	1900	00	00	00	
22	SrTechFPO	9300-34800	4200	01	00	01	01
23	TechFPO Gr-I	5200-20200	2800	01	01	00	
24	TechFPO Gr-II	5200-20200	2400	01	01	00	
25	TechTWM Gr-I	5200-20200	2800	01	00	01	01
26	Khalashi,Khalasi Helper, V/M,F/M	5200-20200	1800	05	00	05	05
27	SWM	5200-20200	1800	02	03	-01(Excess)	(Excess)
		TOTAL-		28	17	17-6(Excess) =11	17

***Total Nos. of posts as per working BOS is 28 nos., out of which 6 nos. of posts are operated in excess , which are not reflected in BOS and included in On Roll strength, hence total nos. of surplus posts is 17 nos vacant posts as identified in this said work study**

3.6. As discussed in above para 3.7, the study team observed that 17nos of vacant posts of different categories (SrTech Carpenter = 2, Tech Carpenter Gr I = 1, Tech Carpenter Gr III = 1, Tech Painter Gr-I - 2, Tech Mason Gr-I – 2, Sr Tech Fitter -1, Tech/Fitter Gr-I – 1, Sr.TechFPO -1, TechTWM Gr-I -1 & Khalasi Helper - 5) are identified as surplus and proposed for surrender

CHAPTER-IV

RECOMMENDATION

The study team has identified 17nos of vacant posts of different categories (SrTech Carpenter = 2, Tech Carpenter Gr I = 1, Tech Carpenter Gr III = 1, Tech Painter Gr-I - 2, Tech Mason Gr-I - 2, Sr Tech Fitter -1, Tech/Fitter Gr-I - 1, SrTechFPO -1, TechTWM Gr-I -1 &Khalasi Helper -5) are identified as surplus and proposed for surrender, which may be deleted from the working BOS.

CHAPTER-V

FINANCIAL IMPLICATION

EXPENDITURE / FINANCIAL SAVINGS PER ANNUM

5.0. The calculation of total expenditure Grade-wise is furnished below-

SN	Category	Pay Band	G/Pay	Basic Pay in Rs	Revised Pay as per 7 th CPC	Salary per annum in INR	Nos of posts proposed for surrender	Total amount in Rs	Total amount in Lakh Rs
1	Sr Tech Carpenter (MCM)	9300-34800	4200	26,250	67,462.5	8,09,550	2	16,19,100.	16.19
2	Tech Carpenter Gr-I	5200-20200	2800	24,850	63,864.	7,66,368	1	7,66,368	7.66
3	Tech Carpenter Gr-III	5200-20200	1900	14,600	37,522	4,50,264	1	4,50,264	4.50
4	Tech Painter Gr- I	5200-20200	2800	24,850	63,864.	7,66,368	2	15,32,736	15.32
5	Tech Mason Gr-I	5200-20200	2800	24,850	63,864.	7,66,368	2	15,32,736	15.32
6	Sr Tech/Fitter	9300-34800	4200	26,250	67,462.5	8,09,550	1	8,09,550	8.09
7	Tech/Fitter Gr-I	5200-20200	2800	24,850	63,864.	7,66,368	1	7,66,368	7.66
6	SrTechFPO	9300-34800	4200	26,250	67,462.5	8,09,550	1	8,09,550	8.09
7	TechTWM Gr-I	5200-20200	2800	24,850	63,864.	7,66,368	1	7,66,368	7.66
8	Khalasi Helper	5200-20200	1800	14,500	37,265	4,47,180	5	22,35,900	22.35
				TOTAL					Rs112.84Lakh (approx.)

5.1. **PROJECTED FINANCIAL SAVINGS PER ANNUM-** Rs.112.84Lakhs per annum

CHAPTER - VI

6.0. READY RECKONER

Pay Band	GP	Mean pay	Basic Pay in Rs	M.F. of 7th CPC(2.57) & revised Pay	Salary per annum in INR
9300-34800	4600	22050	26,650	68,490.5	8,21,886
9300-34800	4200	22050	26,250	67,462.5	8,09,550
5200-20200	2800	12700	15,500	39,835	4,78,020
5200-20200	2400	12700	15,100	38,807	4,65,684
5200-20200	2000	12700	14,700	37,779	4,53,348
5200-20200	1900	12700	14,600	37,522	4,50,264
5200-20200	1800	12700	14,500	37,265	4,47,180